

**FROESCHNERANA MEXICANA, A NEW GENUS AND  
SPECIES OF DERAECORINAE FROM MEXICO  
(HETEROPTERA: MIRIDAE)**

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*Abstract.*—*Froeschnerana mexicana*, a new genus and new species, is described from the Mexican states of Aguascalientes, Guerrero, Jalisco, Oaxaca and Puebla. Its relationship to the genus *Bothynotus* (Clivinemini) is discussed.

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The review of the genus *Bothynotus* by Henry (1979) prompted our attention to this previously undescribed genus found in Mexico. Although distinctive, the genus shares with *Bothynotus* the character of having scattered setae on the hemelytral membrane.

**Froeschnerana**, new genus

*Description.* Deraecorinae, Clivinemini. Characterized by its relatively large size (8.0–9.0 mm), lack of clearly defined collar, narrow embolium, and setose hemelytral membrane.

Head smooth, shining, declivous, vestiture consisting of scattered short setae above and more dense longer setae ventrally; vertex slightly rounded not margined posteriorly; frons vertical; clypeus prominent and projecting more anteriorly than frons; gena prominent; buccula clearly delimited; eyes located anteriorly on head, distance between posterior margin of eye and anterior margin of prothorax slightly less than length of eye in dorsal view, height of eye in lateral view about equal to gena. Margin of antennal socket not touching eye; antennal segment I shorter than vertex width; segments linear; relative lengths of segments from shortest to longest 4-1-3-2; vestiture of segment I somewhat sparse, that of II more dense with length of longer setae not longer than diameter of segment, those of III and IV with occasional setae longer than diameter of segment. Rostrum reaching or almost reaching mid coxae. Pronotum appearing punctate due to color pigmentation around setal bases, however only very indistinctly punctate under reflected light; disc with shallow middorsal sulcus; lateral margins rounded, posterior margin slightly concave; humeral corners rounded; calli flattened, smooth and shining, impressed line from anterolateral corner of pronotum to posterior margin of calli weakly delimited; collar not delimited dorsally; anterior margin of pronotum not cystiform; vestiture consisting of short erect or semi-erect setae. Scutellum very lightly transversely rugulose, parallel-sided, slightly convex, raised above hemelytra. Hemelytra rugose, parallel-sided; sloping downward laterally; vestiture consisting of fairly dense semi-erect setae; embolium narrow; cuneus longer than wide; membrane with two cells, minutely and densely pilose with scattered

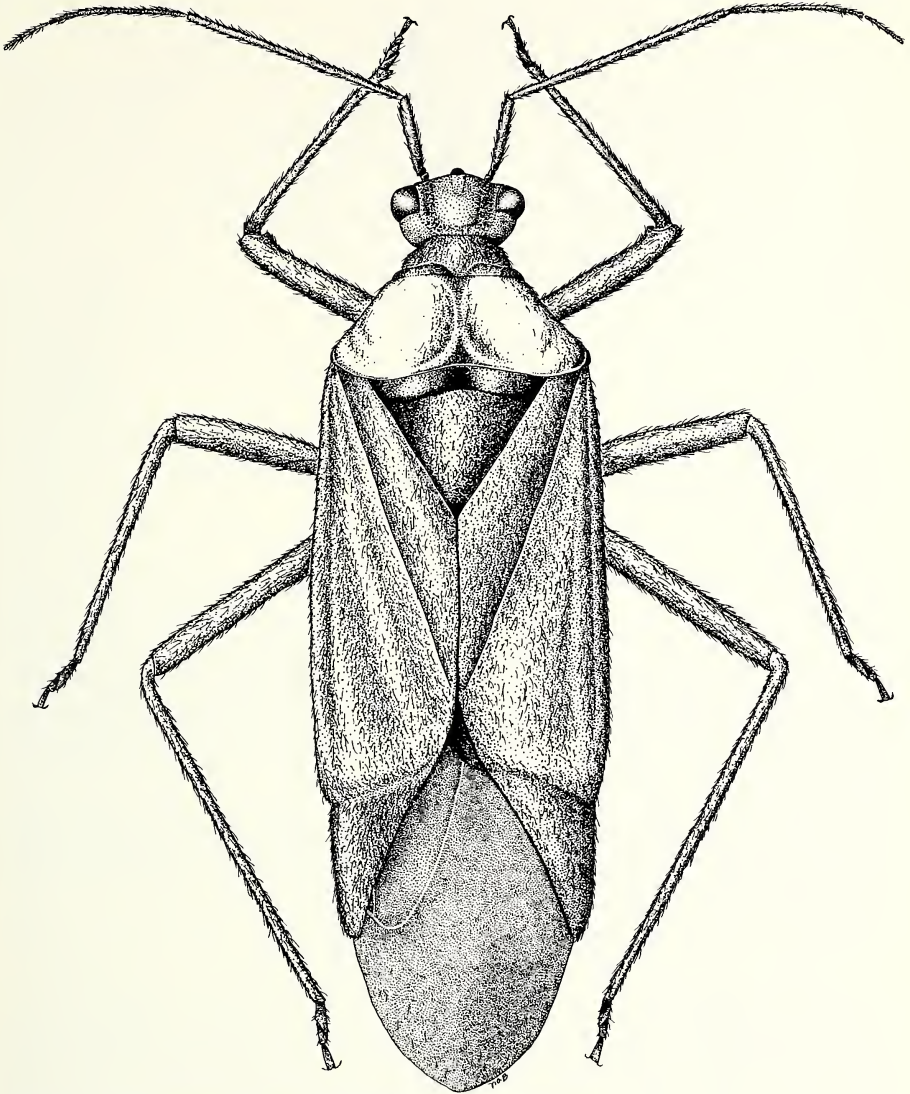
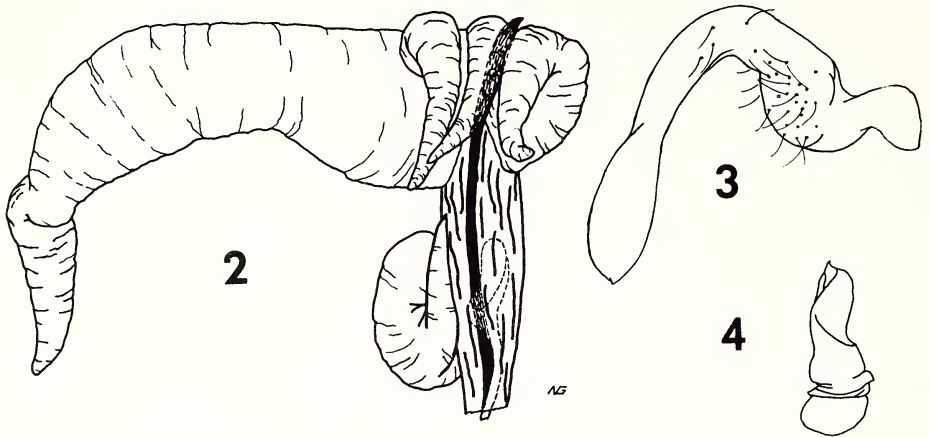


Fig. 1. *Froeschnerana mexicana*, dorsal habitus of male.

longer setae. Femora linear; tibiae without spines, setae about as long as diameter of tibia. Setae on underside of abdomen fairly dense.

*Type species.* *Froeschnerana mexicana*, n. sp.

*Discussion.* The presence of elongate setae on the hemelytral membrane suggests that *Froeschnerana* is closely related to *Bothynotus* since no other genera of the tribe exhibit this specific character. The shape of the head is the same for members of both genera. Among the several differences is the large size (8.0–9.0 mm) and elongate



Figs. 2-4. Male genitalia of *Froeschnerana mexicana* (nr. Autlan, Jalisco). 2. Vesica. 3. Left paramere. 4. Right paramere.

body form of *Froeschnerana* which contrasts with the somewhat smaller size (2.4–4.7 mm) and usually more robust body form of *Bothynotus*. *Bothynotus* is also characterized by having a pronotum which is strongly punctate whereas the pronotum of *Froeschnerana* is very weakly and sparsely punctate. Although variable, members of the genus *Bothynotus* tend to have many long erect or semierect setae on the dorsum of the head whereas *Froeschnerana* specimens have scattered, short semi-decumbent setae.

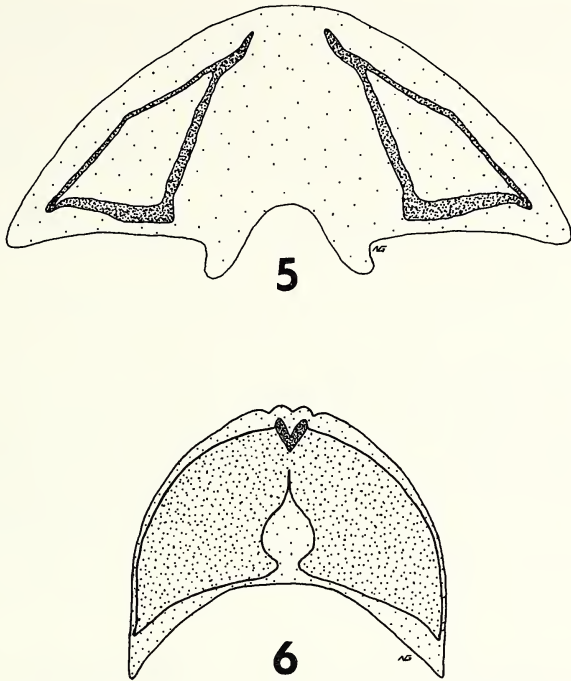
We take pleasure in naming this genus in honor of Richard C. Froeschner, a personal friend and former fellow graduate student of the senior author while at Iowa State University. Dr. Froeschner is the Curator of Hemiptera at the Smithsonian Institution and was honored in the April, 1986 issue of the Journal.

#### ***Froeschnerana mexicana*, new species**

Figs. 1-6

*Description.* MALE (Measurements (in millimeters) taken from 7 specimens; holotype first followed by average and range in parentheses): Length, 8.60 (8.43, 8.00–8.60); width, 2.80 (2.85, 2.68–3.00). Head length, 0.56 (0.54, 0.52–0.60); width through eyes, 1.40 (1.40, 1.36–1.48); vertex width, 0.76 (0.77, 0.72–0.80). Length of antennal segment I, 0.72 (0.71, 0.64–0.76); II, 2.28 (2.30, 2.20–2.44); III, 1.28 (1.28, 1.20–1.36); IV, 0.64 (0.57, 0.48–0.64). Pronotal length, 1.52 (1.52, 1.44–1.68); width across base, 2.48 (2.50, 2.28–2.68). Cuneal length, 1.44 (1.43, 1.32–1.48); width across base, 0.80 (0.76, 0.68–0.84).

General coloration dark fuscous to black with red or orange areas; shining. Head yellow to red, usually orange; clypeus at least basally and apically, underside of head, area behind eyes and band running posteriorly from each antennal socket over frons and coalescing posteriorly on vertex, fuscous to black; rostrum and antennae black. Collar dark fuscous to orange or reddish fuscous, area of calli fuscous to black with



Figs. 5, 6. Female genitalia of *Froeschnerana mexicanus* (nr. Acatepec, Puebla). 5. Sclerotized rings, dorsal view. 6. Posterior wall, dorsal view.

remainder of pronotum orange or red, mesoscutum and scutellum dark fuscous to orange or reddish fuscous; hemelytra dark fuscous to black. Ventral aspect ranging from almost entirely dark fuscous or reddish fuscous to orange. Coxae testaceous to orange at least apically, underside of femora usually testaceous ranging to testaceous or orange on entire basal half, tibiae and tarsi dark fuscous.

Morphological characters as given for genus. Genitalia as in Figures 2-4.

**FEMALE** (Measurements taken from 8 specimens; average first followed by range in parentheses): Length, 8.57 (8.16-8.96); width, 2.85 (2.68-3.08). Head length, 0.60 (0.52-0.68); width through eyes, 1.44 (1.40-1.48); vertex width, 0.85 (0.80-0.92). Length of antennal segment I, 0.73 (0.68-0.80); II, 2.39 (2.32-2.60); III, 1.34 (1.28-1.40); IV, 0.58 (0.56-0.64). Pronotal length, 1.52 (1.40-1.64); width across base, 2.57 (2.44-2.72). Cuneal length, 1.38 (1.28-1.48); width across base, 0.77 (0.68-0.88).

Similar to male in color, lacking pale areas on underside of femora; two females with dark red pronotal discs; membrane of hemelytra with fewer long setae. Genitalia as in Figures 5-6.

*Holotype*. Male, Mexico: Puebla, 4 mi W. Acatepec, 26 July 1973, Mastro & Schaffner. Deposited in the National Museum of Natural History, Washington, D.C.

*Paratypes*. Mexico. Aguascalientes: 1♂, 8 mi E Calvillo, 11 July 1983, Kovarik, Harrison, Schaffner; 1♀, 6 mi E Calvillo, 11 July 1983, Kovarik, Harrison, Schaffner.

Guerrero: 1♀, 4 mi W of Chilpancingo, 15 July 1984, Carroll, Schaffner, Friedlander. Jalisco: 3♂♂, 1♀, 16 km N Autlan, 12–14 July 1983, Kovarik, Harrison, Schaffner. Oaxaca: 1♀, 4.2 mi N Tonaltepec, 21 July 1987, Kovarik, Schaffner. Puebla: 1♂, 1♀, 4.4 mi SW Acatepec, 9 July 1977, J. C. Schaffner; 2♀♀, same locality, 26 July 1974, Clark, Murray, Ashe, Schaffner; 1♂, same locality, 9 July 1981, Bogar, Schaffner, Friedlander; 1♀, same locality, 21 July 1984, Carroll, Schaffner, Friedlander; 1♂, 1♀, 6.3 mi N Tehuacan, elev. 5,900 ft, 22 July 1987, Kovarik, Schaffner. Deposited in the collections of the Instituto de Biología, Universidad Nacional Autónoma de México, Mexico City, D.F. and Department of Entomology, Texas A&M University, College Station, Texas.

*Discussion.* The non-fuscous areas of the individual specimens are usually either orange or red. Both color variations were collected together near Acatepec, Puebla. All specimens taken from near Autlan, Jalisco were primarily orange whereas the individuals from Cavillo, Aguascalientes, were red.

The distribution pattern of this species is unusual. We know of no other mirids (with the possible exception of a species of *Proba* Distant which occurs more or less throughout Mexico) that exist in this fairly well collected area of Puebla (Tehuacan-Acatepec) that also occur in western Mexico (Jalisco, Aguascalientes). All material was collected from sites located on the edges of the plateaus in the region of central Mexico.

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